The MT Laboratory Sentinel

Updates from the MT Laboratory Services Bureau
http://healthlab.hhs.mt.gov/ **02/26/10**

MUMPS IN THE NEWS

Epidemic Parotitis AKA Mumps

"Mumps has been a common disease for centuries. Hippocrates wrote about it almost 2500 years ago. Mumps is a virus that classically causes painful swelling of the parotid glands (saliva glands). Before the vaccine became available, it was an extremely common childhood infection. Mumps used to be predominately a disease of elementary school-aged children. Every 4 years or so, there was a major epidemic. It was also a significant problem in the military. The biggest known epidemic in history occurred during World War II.

"When the vaccine became widespread in 1968, there were more than 152,000 reported cases of mumps in the US. By 1997, the number had dropped to about 680 cases per year (while the population had grown significantly). Today mumps is associated more with college campuses than with elementary schools.

"About 40% of the adult males and adolescents who get mumps develop exquisite pain and swelling (orchitis) in one or both testicles, which then shrivel up and remain permanently atrophied. This is noticeable cosmetically, but is unlikely to cause infertility even if both testicles are involved (contrary to the popular myth).

"Mumps can affect the ovaries in much the same way. 5-10 % of women who get mumps will have some ovarian involvement. Fertility is not thought to be affected. Mumps during pregnancy has not been associated with birth defects, but it does double the early miscarriage rate.

"The classic symptom of mumps is painful swelling of one or both parotid glands, often obscuring the angle of the jaw. The pain is especially intense when tasting sour liquids (lemon juice and vinegar have provoked many a muffled scream). *Other viruses such as influenza, parainfluenza, HIV, CMV, and coxsackieviruses can also cause parotitis. So can staph infections. The most common complications before puberty are meningitis or encephalitis* which typically develop about a week and a half after the parotitis. Other complications of mumps, such as Bell palsy, deafness, arthritis, heart problems, eye problems, thyroiditis, or inflammation of the pancreas are quite rare.

'Mumps is suggested by the history and physical exam. *Because the mumps virus is so uncommon today, further testing to determine the cause of the parotitis is wise. This might be done with blood, urine, throat washings, or spinal fluid, depending on the symptoms*.

"Treatment is aimed at relieving the symptoms. Anti-inflammatory medicines can reduce the pain and fever.

"The mumps vaccine gives lasting immunity to more than 95 percent of the people who get it after the first dose."

The above information was extracted from the website of Alan Greene MD FAAP: (DrGreen.com. pediatrics, naturally) http://www.drgreene.com/azguide/mumps

Folk Medicine and Mumps

- Diagnosis: If you could eat a sour pickle, you did not have mumps. The sourness made the jaws tighten up
- Treatment: Tie a piece of dried umbilical cord around the neck of a boy with mumps to prevent sterility.
- Treatment: Rub sardine grease all over the face and neck, and eat the sardines.

Rectal and Oropharyngeal Testing by NAAT Now Available for Chlamydia & Gonorrhea

The Montana Public Health Laboratory (MTPHL) has completed the necessary verification studies to perform Nucleic Acid Amplification Tests (NAAT) rectal and oropharyngeal specimen testing for Chlamydia and GC for those populations at risk for infections. This testing is offered at the same price as our current CT/GC NAAT testing.

Rectal and oropharyngeal specimens should be collected and transported in the unisex swab kits, the same collection kits used for cervical and urethral specimens.

- Remember to check and verify the expiration dates on all transport media (i.e. Aptima CT/GC, Viral, Cary-Blair…) as testing will not be performed on specimens placed in expired media.
- Remember to fax MTPHL a "Request Add on Test" form when requesting any additional testing. If you want additional testing and do not have a copy of one of these forms, please call 800-821-7284 and a copy will be provided.

Contact the Montana Public Health Laboratory at 800-821-7284 with any questions about the new testing options.

MTPHL Requisition Forms

Please write the provider's
- ✓ ***Last Name and***
- ✓ ***First Name or Initial***
  to distinguish providers with identical last names.

Thank You !

Communicable Disease Updates

February 12 *and* February 19
are included in the next two pages of this newsletter.

MT Communicable Disease Update as of 02/19/10

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.
Questions regarding its content should be directed to 406.444.0273 (24/7/365).
http://cdepi.hhs.mt.gov

DISEASE INFORMATION

Summary – *Week 6* – Ending 02/13/10 – Disease reports received at DPHHS during the reporting period February 7-13, 2010 included the following:

- Vaccine Preventable Diseases: Pertussis (2), Varicella (3)
- Enteric Diseases: Campylobacteriosis (1), Cryptosporidiosis (1), Giardiasis (2), non0157 STEC (1), Salmonellosis (2)
- Other Conditions: Legionellosis (1)
- *NOTE: The report has multiple pages reflecting the following information: (1) vaccine preventable and enteric diseases YTD; (2) other communicable diseases YTD; (3) cases just this week; (4) clusters and outbreaks; and (5) an STD summary.*

NEW! Surveillance Snippets

- When reporting any vaccine preventable disease, it is very important to collect travel / exposure history and vaccination information, including dates of travel and dates of vaccination!
- Clusters of varicella are being reported throughout the state. Strategies for controlling outbreaks can be found at http://www.cdc.gov/vaccines/vpd-vac/varicella/outbreaks/manual.htm.

Influenza

During week 6 (02/13/10), influenza activity stayed at the same level with no states reporting widespread activity; 3 states, regional; PR and 9 states, local activity; DC, and 35 states, sporadic activity; 3 states, no activity; and Guam did not report. Influenza and pneumonia deaths and doctor visits for flulike illnesses dropped below baseline levels. (http://www.cdc.gov/flu/weekly/)

Activity in Montana – Activity level in Montana is **NO ACTIVITY.**

NEW! Influenza activity continues to decline in the state. As of February 13, 2010, 761 MTPHL PCR confirmed influenza cases had been reported from 40 counties since August 30, 2009. ***No MTPHL PCR confirmed cases have occurred since January 16, 2010.*** Of the 2792 specimens submitted to the Montana Public Health Laboratory since August 30, 2009, 761 (>99%) have been confirmed as 2009 H1N1 influenza cases.

NEW! Of the 10,685 reports of confirmed or suspected H1N1cases from providers and local health departments, 181 were hospitalized. 41% were female. Median age of those hospitalized was 42 (range 1 month – 88 years). 62% had underlying health conditions. Seventeen influenza-related deaths have been reported in Montana.

NEW! Rapid tests are not performing reliably at this point; false positives are occurring. *If providers want accurate information about influenza status on a patient, it is recommended that specimens be sent to the Montana Public Health Laboratory for PCR testing.* Current information on influenza testing by the Montana Public Health Laboratory can be found at http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml.

NEW! Norovirus – Norovirus clusters, including some in long term care facilities have been reporting since the beginning of the year. Guidance documents can be found at: http://www.dphhs.mt.gov/PHSD/epidemiology/cdepi-norovirus.shtml.

NEW! STD Report Available - The Indian Health Service (IHS) National Sexually Transmitted Disease (STD) Program has just released its new *Indian Health Surveillance Report – Sexually Transmitted Diseases 2007.* The report presents statistics and trends for STDs among American Indians and Alaska Natives (AI/AN) in the United States. This report is the product of collaboration between the Centers for Disease Control and Prevention (CDC) and the Indian Health Service that provides a national profile as well as STD rates and trends for the 12 IHS administrative areas. The report is currently available electronically at: http://www.cdc.gov/STD/stats/IHS/IHS-SurvRpt_Web508Nov2009.pdf.

Mumps Outbreak – New York - The largest U.S. mumps outbreak since 2006 began at a summer camp in New York in June 2009 when a camper who acquired the disease in England came down with symptoms while at camp. As of January 29, 2010, a total of 1,521 cases had been reported, with onset dates from June 28, 2009, through January 29, 2010. The outbreak has remained confined primarily to the tradition-observant Jewish community in new York, with <3% of cases occurring among persons outside the community. The largest percentage of cases (61%) has occurred among persons aged 7--18 years, and 76% of the patients are male. Among the patients for whom vaccination status was reported, 88% had received at least 1 dose of mumps-containing vaccine, and 75% had received 2 doses.

Suspect cases of mumps should be evaluated using the current case definition which includes specific information about recommended laboratory testing (http://www.cdc.gov/ncphi/disss/nndss/casedef/mumps_2008.htm).

It is also important to remember that parotitis may be caused by a number of other pathogens, so laboratory testing is necessary to confirm the diagnosis of mumps. Information about mumps and mumps vaccination: http://www.cdc.gov/vaccines/vpd-vac/mumps/default.htm .

MT Communicable Disease Update as of *02/12/10*

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.
Questions regarding its content should be directed to 406.444.0273 (24/7/365).
http://cdepi.hhs.mt.gov

DISEASE INFORMATION

Summary – *Week 5* – Ending 02/06/10 – Disease reports received at DPHHS during the reporting period January 30 – February 6, 2010 included the following:

- Vaccine Preventable Diseases: Pertussis (1), Varicella (1)
- Enteric Diseases: Cryptosporidiosis (1), Salmonellosis (1)
- Other Conditions: Enteroviral Meningitis (1)

Influenza During week 5 (02/6/10), influenza activity stayed at the same level with no states reporting widespread activity; 6 states, regional; PR and 11 states, local activity; DC, Guam, and 28 states, sporadic activity; 4 states, no activity; and USVI and 1 state did not report. There are mixed signals from other indicators: flu and pneumonia deaths dropped below baseline, though doctor visits for flulike illnesses were above baselines in three regions. (http://www.cdc.gov/flu/weekly/)

UPDATE! Activity in Montana – Activity in Montana was lowered to the **NO ACTIVITY** level. None of the 155 specimens PCR tested for influenza since January 10, 2010 have been positive. In addition, there have been several specimens that were rapid influenza detection test positive, but did not confirm by PCR. Rapid tests are less specific when the incidence of influenza is low. *If providers want accurate information about influenza status on a patient, it is recommended that specimens be sent to the Montana Public Health Laboratory for PCR testing.* Current information on influenza testing by the Montana Public Health Laboratory can be found at http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml.

REPORTING - As the 2009-2010 influenza season progresses, we would like to remind public health officials of the importance of detecting changes in influenza activity across the country.

- ***Testing***, including sub-typing of influenza A viruses (i.e, PCR to state) to detect both pandemic and seasonal influenza strains, should continue for all ***hospitalized and severely ill patients***, including patients aged >65 years.
- Timely ***reporting of all pediatric deaths*** associated with laboratory-confirmed influenza remains essential to detecting changes in severity of disease among children.
- ***Continued reporting of ILI cases through ILINet (sentinel providers)*** will be important to tracking peak influenza activity.
- Health-care providers should continue ***reporting to local or state health departments any particularly severe or unusual influenza cases*** or cases among specific vulnerable groups, such as pregnant women, immunocompromised persons, and health-care workers.
- ***Institutional closings or clusters of influenza*** infections in prisons, schools, colleges, and long-term care facilities should also be reported through state and local health departments.
- Any adverse reactions to antiviral medications or to influenza vaccines should continue to be reported via the Vaccine Adverse Event Reporting System.

Changes in the geographic spread, type, and severity of circulating influenza viruses will continue to be monitored with updates reported weekly in the online national influenza surveillance summary, FluView.

People who have not been vaccinated should still continue to get vaccinated!

Multistate Outbreak of Human *Salmonella* Montevideo Infections - The CDC and public health officials in many states are currently investigating a multistate outbreak of *Salmonella* serotype Montevideo. As of January 25, 2010, a total of 189 individuals infected with a matching strain (DNA fingerprint) of *Salmonella* Montevideo have been reported from 40 states since July 1, 2009. Preliminary studies involving ill persons from this outbreak have suggested contaminated salami as the source of illness. As a result, this outbreak has prompted the recall of 1,240,000 pounds ready-to-eat Italian sausage varieties by Daniele International Inc. *The product has been distributed in Montana. No Salmonella cases related to this outbreak have been identified in MT as of January, 29th, 2010.* However, cases have been identified in Washington (14), Oregon (8), Idaho (2), Wyoming (2), North Dakota (1), and South Dakota (3), as well as many other western states. For additional information about this outbreak and recall, follow: http://www.cdc.gov/salmonella/montevideo/map.html / (http://www.fsis.usda.gov/News_&_Events/Recall_006_2010_Expanded/index.asp)

NEW! **Mumps Outbreak – New York** - The largest U.S. mumps outbreak since 2006 began at a summer camp in New York in June 2009 when a camper who acquired the disease in England came down with symptoms while at camp. As of January 29, 2010, a total of 1,521 cases had been reported, with onset dates from June 28, 2009, through January 29, 2010. The outbreak has remained confined primarily to the tradition-observant Jewish community in new York, with <3% of cases occurring among persons outside the community. The largest percentage of cases (61%) has occurred among persons aged 7--18 years, and 76% of the patients are male. Among the patients for whom vaccination status was reported, 88% had received at least 1 dose of mumps-containing vaccine, and 75% had received 2 doses. *Suspect cases of mumps should be evaluated using the current case definition which includes specific information about recommended laboratory testing (*http://www.cdc.gov/ncphi/disss/nndss/casedef/mumps_2008.htm). It is also important to remember that parotitis may be caused by a number of other pathogens, so laboratory testing is necessary to confirm the diagnosis of mumps. Information about mumps and vaccination: http://www.cdc.gov/vaccines/vpd-vac/mumps/default.htm

NEW! **Erythromycin Ophthalmic Ointment** – Updated information on the current availability of erythromycin ophthalmic ointment can be found at http://www.cdc.gov/std/treatment/2006/erythromycinOintmentShortage.htm or http://www.fda.gov/Drugs/DrugSafety/DrugShortages/ucm050792.htm.